

Jeopardy Assessment
for the Proposed Incidental Taking Authorization
of the Butler's Garter Snake

Target Store
City of Oak Creek, Milwaukee County, Wisconsin

Background

The state-threatened Butler's garter snake is the smallest of the five Wisconsin garter snake species. Both sexes of this species reach maturity during their second full year and females deliver 4-19 live-born young in mid to late summer. This species requires a moderately open to open canopy habitat, preferably with both upland and wetland habitat. Butler's naturally hibernate in open-canopy wetlands (sedge meadows, fringes of cattail marshes, etc.) but are also known to occupy sites that provide other means for successful overwintering (i.e. old landfills where conditions provide access below the frostline and where adequate moisture exists).

The Butler's garter snake is a colonial species that is restricted to several southeastern counties in Wisconsin. There are currently 30 locations where this species has been documented from 1973 to present. Twenty-five of these records have been documented since 1990. Most sites that have been moderately to heavily surveyed for Butler's show a healthy age-class structure, indicating that regular recruitment is occurring on those sites. Surveys and monitoring since its listing in 1997 reveal that Butler's often occur in very large numbers on relatively small sites (i.e. 400+ snakes detected on a 20-acre site with less than 50% suitable [open canopy] habitat). Three intensive survey/monitoring efforts associated with mitigation for incidental take to date have involved large numbers of Butler's garter snakes (over 1200 Butler's on three isolated sites along Lincoln Creek within the City of Milwaukee). Surveys have also demonstrated that Butler's can occur, sometimes in high numbers, on highly disturbed and degraded sites. One example is the location of 62 Butler's during one survey of a brownfield site in the industrial heart of Milwaukee. Most of the snakes were found under pieces of broken concrete in a large, abandoned, gravel parking lot that was adjacent to a small wetland.

In Summary, the Butler's garter snake is a fast-maturing species with potentially high annual recruitment. It can sustain populations on highly disturbed sites if the disturbance factors are eliminated and suitable wetlands are present on or adjacent to these sites. Since 1997, most sites where Butler's were suspected to occur, based on proximity to known range and habitat and which were subsequently surveyed, verified their presence.

Jeopardy Assessment

The proposed Target Store project is anticipated to result in the incidental taking of Butler's gartersnake individuals and loss of a portion of existing snake habitat. In order to minimize take, several conservation measures will be required as described below and be incorporated into a DNR-approved Conservation Plan and included as conditions to the pending Water Quality Certification:

1. Time activities to minimize take of the snake in uplands and wetlands and;
2. Move snakes to a required wetland mitigation site. This new site does not currently support Butler's gartersnakes but very likely did historically. It is located within 1.3 miles of the Target site along the same stream (Oak Creek). The mitigation site is 31 acres in size and will provide substantially more snake habitat than will be lost at the Target site. The mitigation site is likely to contribute to the long-term conservation of the Butler's gartersnake whereas the isolated Target location likely does not.

The mitigation site will permanently protected through a conservation easement to the Department of Natural Resources. Restoration of the mitigation site will begin in early 2004.

The department has determined that the proposed project is not likely to jeopardize the continued existence or recovery of the state population of these snakes or the whole plant-animal community of which they are a part.

The Water Quality Certification and pending Conservation Plan will commit Target Corporation to the following conditions:

1. All wetlands on the Target store site will be completely surrounded with trenched-in sediment fencing. The fencing is to be placed a minimum of 20 feet away from the delineated wetland boundaries in the uplands except where the existing access road off of Howell Avenue run through or proximal to Wetlands 2 and 3 as identified in Figure 5 of the NR103 Practicable Alternatives Analysis and Request for Provisional GP 10 Authorization (PAA) dated September 2003. The fencing must be installed prior to March 15, 2004 (prior to snake emergence in spring).
2. An orange snow fence will be installed immediately adjacent to and bordering both sides of the access road off of Howell Avenue. The fencing must be installed along the access road in as far as the eastern edge of the primary building pad area based on the Site Plan, where it will be installed perpendicular to the access road to the northern and southern edges of the property. The perpendicular sections of the fencing are to be placed west of the trenched-in sediment fencing for Wetlands 1 and 2. The purpose of this fence is to prevent construction equipment from entering any snake habitat that is adjacent to the actual building pad area. This fencing is to be installed prior to March 15, 2004.
3. Both the sediment fencing and the orange snow fencing are to be inspected on at least two non-consecutive days per week beginning on March 16, 2004. All fencing failures (tears, unstapled fencing material, flattened fence sections) are to be repaired within 24 hours of each inspection.
4. Butler's gartersnake removal will occur within each fenced-in wetland area (Wetlands 1,2 and 3 encompassing 5 fenced units- Figure 5 of PAA) commencing in mid-late April. Plywood sampling boards are to be placed in the uplands within the fenced wetland areas to augment snake detection. Board placement and numbers will follow methods described in the pending Conservation Plan (Plan). All snakes removed are to be maintained according to methods described in the pending Plan. Snake removals are to continue until DNR determines that no snakes are present (maximum of 12 surveys days in suitable weather) or until the rate of snake removals drops significantly. Cessation of snake removal will be determined and approved by the Wisconsin DNR.
5. Target Corporation agrees to implement the DNR-approved Wetland Restoration Plan that is to describe methods and an implementation timetable and a monitoring plan with alternatives for resolving restoration problems that may arise. As part of that plan they agree to install an artificial snake hibernaculum in the mitigation site in order to insure that the snakes translocated to this site from the Target store site have a place to overwinter. Target Corporation consultants will work with the Bureau of Endangered Resources on the design and installation of the hibernaculum.
6. Target Corporation will hire a qualified herpetologist familiar with Butler's gartersnake ecology to develop a Butler's gartersnake conservation plan. Once the Department has received and approved this plan, Target Corporation will be responsible for implementing the approved plan in its entirety. The plan is to include methods and timing for snake removals, identify the holding procedures and facilities to be used to hold snakes between their removal and release dates, identify aspects of habitat restoration for the mitigation plan that will benefit the snake, determine the best location for the hibernaculum installation, and plans for releasing and monitoring the snakes to determine the success of the translocation and habitat restoration efforts. The plan shall identify a budget for implementing the plan. Target Corporation is to sign the plan, agreeing to fully implement the plan.